

**Arizona Health Care Cost Containment Health System  
Medicaid Transformation Grant Program**

**Arizona Medical Information Exchange (AMIE) and  
Purchasing & Assistance Collaborative for  
Electronic Health Records (PACeHR)**



**Centers for Medicare and Medicaid Services**

August 13, 2010

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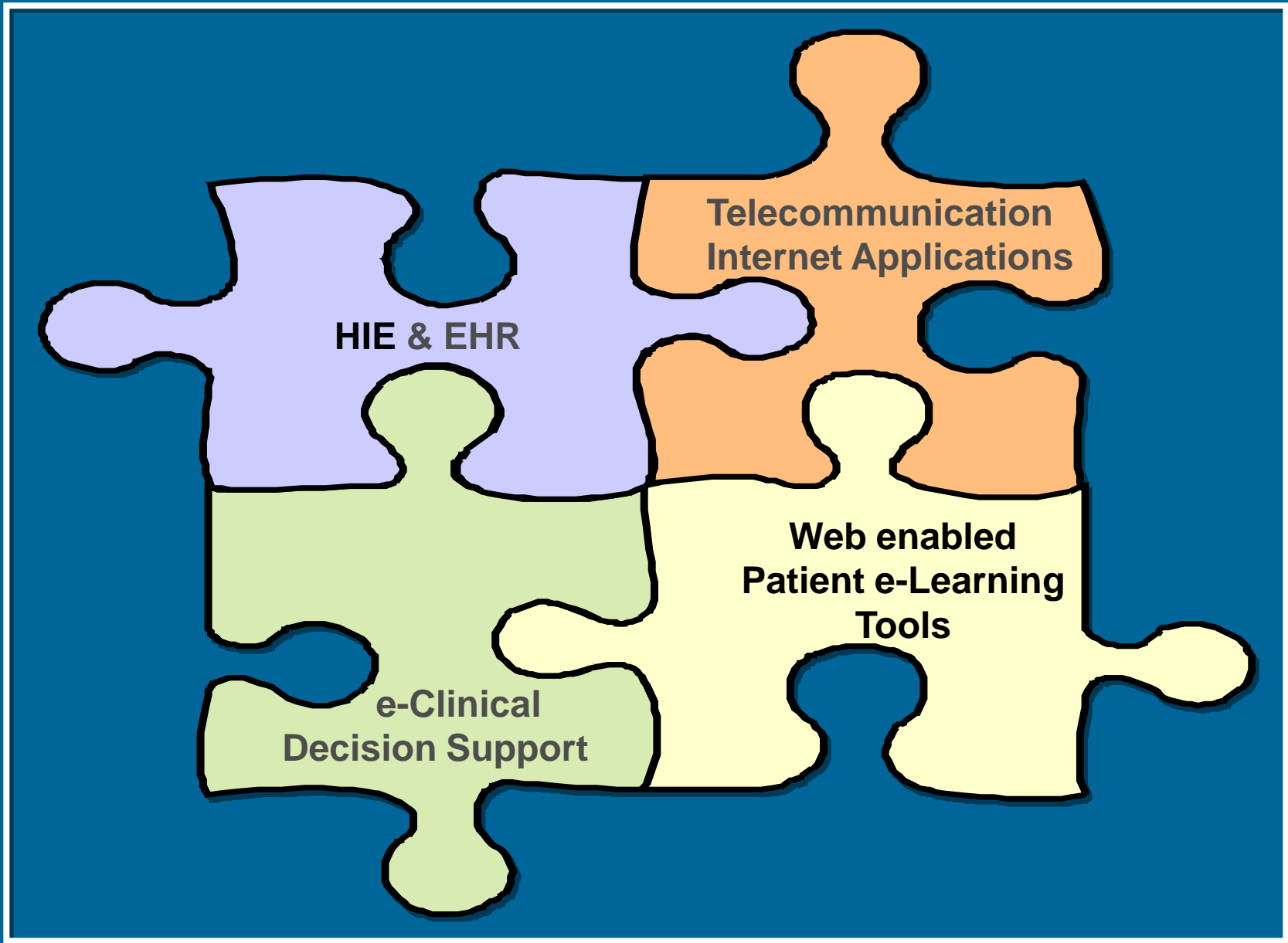
# Objectives

- Provide overview of key AHCCCS e-Health Initiatives (now non-profit organizations) with focus on lessons learned
  - Arizona Medical Information Exchange (AMIE)
  - Purchasing & Assistance Collaborative for Electronic Health Records (PACeHR)
- Questions (informal) and discussion

# AHCCCS Medicaid Transformation Grants

- Feb 07 – Nov 09
- \$11.7 million
- Develop and deploy
  1. **Statewide Health Information Exchange (HIE) (AMIE)**
  2. **Electronic health record (EHR) program (PACeHR)**
  3. **Data repository design**
- Oct 07- Nov 09
- \$4.4 million
- Design and implement *Medicaid Decision Support Toolbox*
  1. e-learning tools
  2. Clinical Decision Support

# Interoperable Projects = Medical Home





Secure, web-based health information exchange to give providers quick access to key health information (medical home) through a secure Internet connection at the point of care.

# AMIE Snapshot

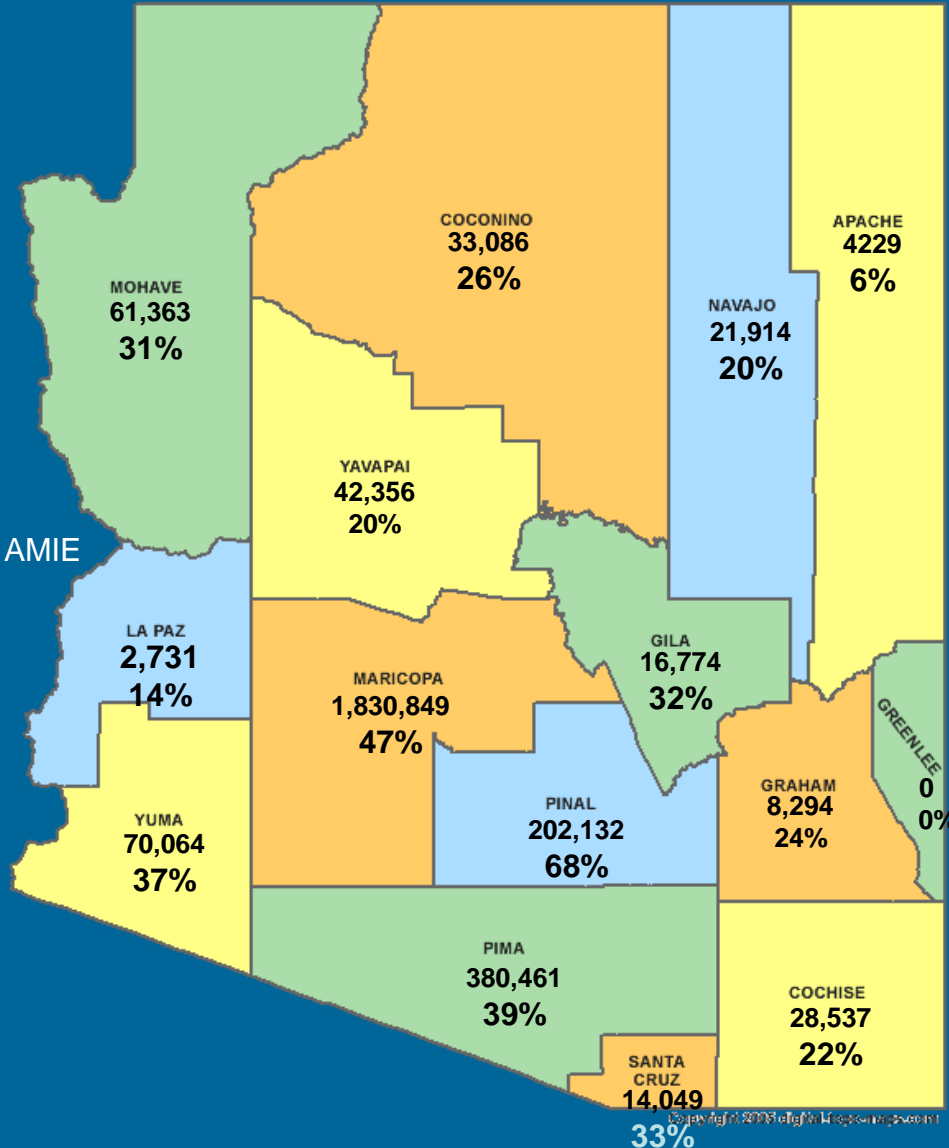
- Federated exchange with statewide reach
- Operated October 2008 to December 2009
- Non-profit August 9, 2009
- 3 major record types
  - Discharge Summaries (and other reports)
  - Medication History (PBM claims)
  - Laboratory Test Results (Quest)
- 10 hospitals, 6 PBMS, 1 lab
- 100 + users in diverse clinical settings
  - Emergency Departments
  - Ambulatory and Behavioral Health Clinics
  - Private Offices

# AMIE Coverage by County

September 4, 2009

County Populations from 2007 Est. U.S. Census

Number of patients in AMIE  
% of county population in AMIE



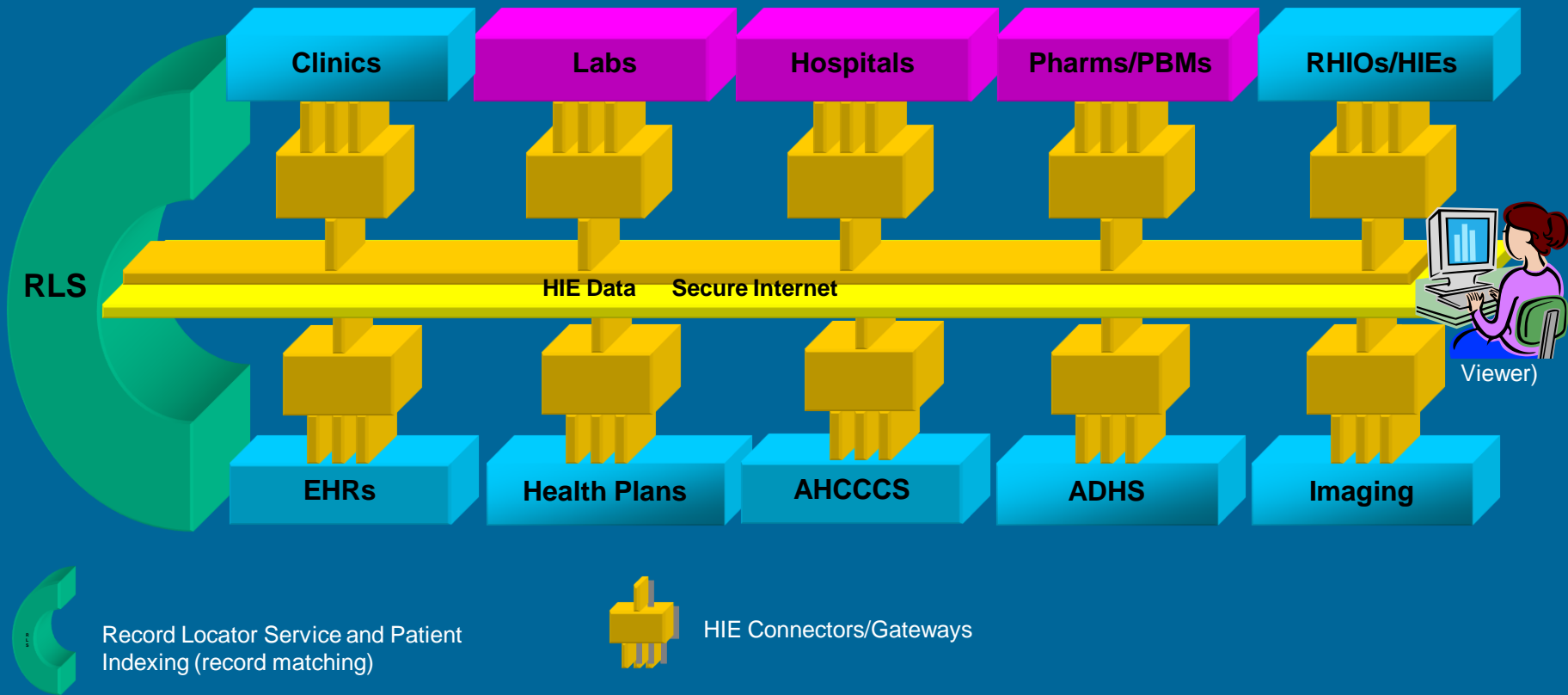
# AMIE at Technical Suspension

(Grant concluded in January 2010)

- Operating statewide, multi-payor
- Over 7.6 Million Records
  - Labs (Sonora Quest)
  - Medication Histories (Medicaid PBMs)
  - Discharge Summaries and other documents (3 largest hospital systems)
- Over 3.1 Million Patients (~50% of State)
- Over 100 users (clinicians and delegates)
- Expansions in process
  - Clinician Users
  - Data Partners
  - Behavioral Health Pilot




# Arizona Medical Information Exchange




# Guiding Principles (2007)

- Maximize open source software
- Meet and/or establish standards
  - Security and Privacy (HIPAA)
  - Data Exchange/Messaging (HL7, DICOM, NCPDP, ASCX12, ELINCS)
  - Document (CDA, CCD)
  - Terminology (ICD 9, SNOMED, UMLS, LOINC, CPT, HCPCS Category II, NDC)
  - Web technologies and internet connectivity standards
  - Certification Commission for HIT (CCHIT)
  - Medicaid Information Technology Architecture (MITA)
  - Best practices for application architecture
  - Nationwide Health Information Network (NHIN)
- Privacy and security paramount
- Federated design (no central data stored)
- Low cost to providers to facilitate use

# Web-based and intuitive



Arizona Medical Information Exchange  
Proof Of Concept



Viewer Login

### USER LOGIN

User Name:

Password:

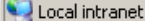

**Login**

- **Change your password?**  
If you wish to change your password, CLICK [Change Password](#)
- **Not registered yet?**  
Call the Operations Support team [602-708-2681](#)
- **Having problems logging in?**  
Call the Operations Support team [602-708-2681](#)



**WARNING NOTICE:**

This system is restricted to use by Participants and their Authorized Users for the purpose of securing health care Data for Permitted Uses. The State of Arizona strictly prohibits unauthorized access, use or modification of this system or its content. Unauthorized usage and/or users are subject to disciplinary proceedings and/or criminal and civil penalties under State, Federal, or other applicable domestic and foreign laws. The use of this system may be monitored and recorded for administrative and security reasons.

Anyone accessing this system expressly consents to such monitoring and is advised that if monitoring reveals possible evidence of criminal activity, the State of Arizona may provide the evidence of such activity to law enforcement officials. All users must comply with the terms of the Participation Agreement and applicable laws and regulations regarding Personally




# Search by Name or ID

 **Arizona Medical Information Exchange**  
Proof Of Concept 

[Viewer Login](#) > Patient Search Logged In: Kroll, Lindsey [Log out](#) [Help](#)



**NAME SEARCH** **AHCCCS ID SEARCH**

Last Name:  First Name:   
☐ [Click here if Last Name is less than 4 letters.](#) ☐ [Click here if First Name is less than 2 letters.](#)

Date of Birth:   Gender:

**Find** **Clear**

*At least three fields are required.*


 **Arizona Medical Information Exchange**  
Proof Of Concept 

[Viewer Login](#) > Patient Search Logged In: Kroll, Lindsey [Log out](#) [Help](#)

**NAME SEARCH** **AHCCCS ID SEARCH**

Last Name:   
☐ [Click here if Last Name is less than 4 letters.](#)

AHCCCS ID: \*  **AND** **OR**

Date of Birth:  

**Find** **Clear**

*\*Fields are Mandatory*  
*Note: Last name or date of birth must be entered in addition to the AHCCCS ID*

# Attest treatment relationship



Arizona Medical Information Exchange  
Proof Of Concept

[Viewer Login](#) > Patient Search

NAME SEARCH

AHCCCS ID SEARCH

Last Name:

☐ [Click here if Last Name is less than 4 letters.](#)

First Name:

☐ [Click here if First Name is less than 2 letters.](#)

Date of Birth:

Gender:

Find

Clear

At least three fields are required.

## Patient Search Results:

Sel	AHCCCS ID	Last Name	First Name	MI	Date of Birth	Gender	SSN(4)	Address	City	State	Zip Code
<input type="checkbox"/>	295268603	Roth	Wendy	N	09/26/1970	F	5268	527 S Woodland Ways	Phoenix	AZ	85032

I certify that I am a health care provider who is currently providing health care to this patient for the purpose of diagnosis or treatment of that patient.


### My current role is:

- ☐ Consulting physician (and/or clinician) at request of patient's physician (and/or clinician)
- ☐ Emergency Department physician (and/or clinician) treating this patient
- ☐ Primary Care physician (and/or clinician) treating this patient
- ☐ Specialist physician (and/or clinician) treating this patient

Uncheck All

Retrieve Patients

# Select record for viewing

Help

### Filter Criterion

Select your Record Type: 

All  
Discharge Summary  
Lab Report  
Medication History

Select Dates: ☐ Time Period 

All

  
☒ Date Range From: 

\_\_/\_\_/\_\_

 To: 

\_\_/\_\_/\_\_


Apply Filter

Clear

### PATIENT RECORDS

Last Name: **Roth** First Name: **Wendy** MI: **N** Date of Birth: **09/26/1970**  
Gender: **F** AHCCCS ID: **Z95268603** Last 4 digits of SSN: **5268**  
Address: **527 S Woodland Ways Phoenix AZ 85032**

Sel	Record Type	Date of Service	Source	Category	Record Descriptor
<input type="checkbox"/>	Discharge Summary	06/19/2006	Banner Estrella Medical Center	Hospital	Discharge Summary
<input type="checkbox"/>	Discharge Summary	07/21/2007	Banner Estrella Medical Center	Hospital	Discharge Summary
<input type="checkbox"/>	Discharge Summary	12/28/2007	MIHS	Hospital	NEUROLOGY
<input type="checkbox"/>	Discharge Summary	07/24/2008	MIHS	Hospital	NEUROLOGY
<input type="checkbox"/>	Lab Report	04/18/2007	SonoraQuest	Lab	Lab Report
<input type="checkbox"/>	Lab Report	04/10/2006	SonoraQuest	Lab	Lab Report
<input type="checkbox"/>	Lab Report	09/06/2006	SonoraQuest	Lab	Lab Report
<input type="checkbox"/>	Medication History	09/07/2006	Managed Care Pharmacy Consultants, Inc	RX History	Medication History


 **GREEN** Record has been previously retrieved and is Open.  
**YELLOW** Record has been previously retrieved and Closed.

Uncheck All


Retrieve Records

Local intranet

# Search results displayed



Arizona Medical Information Exchange  
Proof Of Concept



Viewer Login > Patient Search > Patient Records

Logged In: Kroll, Lindsey [Log out](#)

[Filter Criterion](#)

Select your Record Type:

All  
Discharge Summary  
Lab Report  
Medication History

Select Dates:

☒ Time Period 

All

☐ Date Range From: 

\_\_/\_\_/\_\_

 To: 

\_\_/\_\_/\_\_

Apply Filter

Clear

[PATIENT RECORDS](#)

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<input type="checkbox"/>	Discharge Summary	12/28/2007	MIHS	Hospital	NEUROLOGY
<input type="checkbox"/>	Discharge Summary	07/24/2008	MIHS	Hospital	NEUROLOGY
<input type="checkbox"/>	Lab Report	04/18/2007	SonoraQuest	Lab	Lab Report
<input type="checkbox"/>	Lab Report	04/10/2006	SonoraQuest	Lab	Lab Report
<input type="checkbox"/>	Lab Report	09/06/2006	SonoraQuest	Lab	Lab Report
			Managed Care		

Done

Local intranet

# View Medication History

## Arizona Medical Information Exchange

Patient Name: Roth, Wendy DOB: 09/26/1970 Gender: Female MCPC ID: 52686042

Insurance ID:

Last Update: 09/15/2008 Source: Managed Care Pharmacy Consultants, Inc, Tucson, AZ

The medication history displayed may not represent a complete medication history for this patient. Please be aware that some medications may not appear due to confidentiality regulations.

Medication	Strength	Date Filled	Qty	Days Supply	Days Early	Days Late	Prescriber	Dispensed at:
METHIMAZOLE	10MG	05/06/2008	90.0	30		54	BROWNE	WALGREENS #06692
PROPRANOLOL HCL	40MG	05/06/2008	60.0	30		54	BROWNE	WALGREENS #06692
METHIMAZOLE	10MG	02/12/2008	90.0	30		&#160;	BROWNE	WALGREENS #06692
PROPRANOLOL HCL	40MG	02/12/2008	60.0	30	-10		BROWNE	WALGREENS #06692
PROPRANOLOL HCL	20MG	02/07/2008	30.0	15		&#160;	CAREY, RICHARD	WALGREENS #06692



Viewed By: Training, Trainee 4

Viewed On: 04/14/2009 03:12 PM MST





# View Lab


Arizona Medical Information Exchange


[Patient Records](#) > Patient Record Viewer
 Logged In: Yastrov, Perry [Log out](#)

Sort By: Date of Service 2 Close All Pop-Ups
? [Help](#)


Roth, Wendy N  
Lab Report  
09/06/2006

Roth, Wendy N  
Medication History  
09/07/2006

Roth, Wendy N  
Discharge summarization note - Hospital  
07/21/2007

Roth, Wendy N  
Discharge summarization note - Hospital  
07/24/2008

LABORATORY REPORT


**Sonora Quest Laboratories**

**SONORA QUEST LABORATORIES**  
1255 W Washington St  
Tempe, AZ 85281-1210

Collected Date   Received Date   Collected By  
09/06/2006   05/02/2008

**REQUISITION NO**  
772300005350

**PHYSICIAN**  
Ross, Doug S Dr.

**Reported Date**  
03/19/2009

PATIENT	DOB	AGE	SEX	PATIENT ID	ACCESSION
Roth, Wendy N	09/26/1970	37	F		526

Patient Home Phone:

REQUESTS	RESULTS	OUT OF RANGE	REFERENCE RANGE
<i>CBC W/DIFF,W/PLT</i>			
WBC	10.1		4.0-11.0
RBC		4.10	4.30-6.00
HEMOGLOBIN		12.8	13.0-18.0
HEMATOCRIT		37.4	40.0-53.0
MCV	91		78-100
MCH	31.2		27.0-34.0
MCHC	34.2		31.0-37.0
RDW	13.3		12.1-18.2
PLATELET COUNT	272		130-450
MPV	8.9		7.5-11.5
CALD1SD	12.1		

# HIE challenges are broad.

- Politics
- Funding and Sustainability
- Policy
- Technology
- Outreach
- Adoption

# Think statewide. Start strategic.



**Banner Health**

**Maricopa Integrated Health System**

**Catholic Healthcare West - St. Joseph's Hospital and Medical Center**

**Sonora Quest Laboratories**

Managed Care Pharmacy Consultants

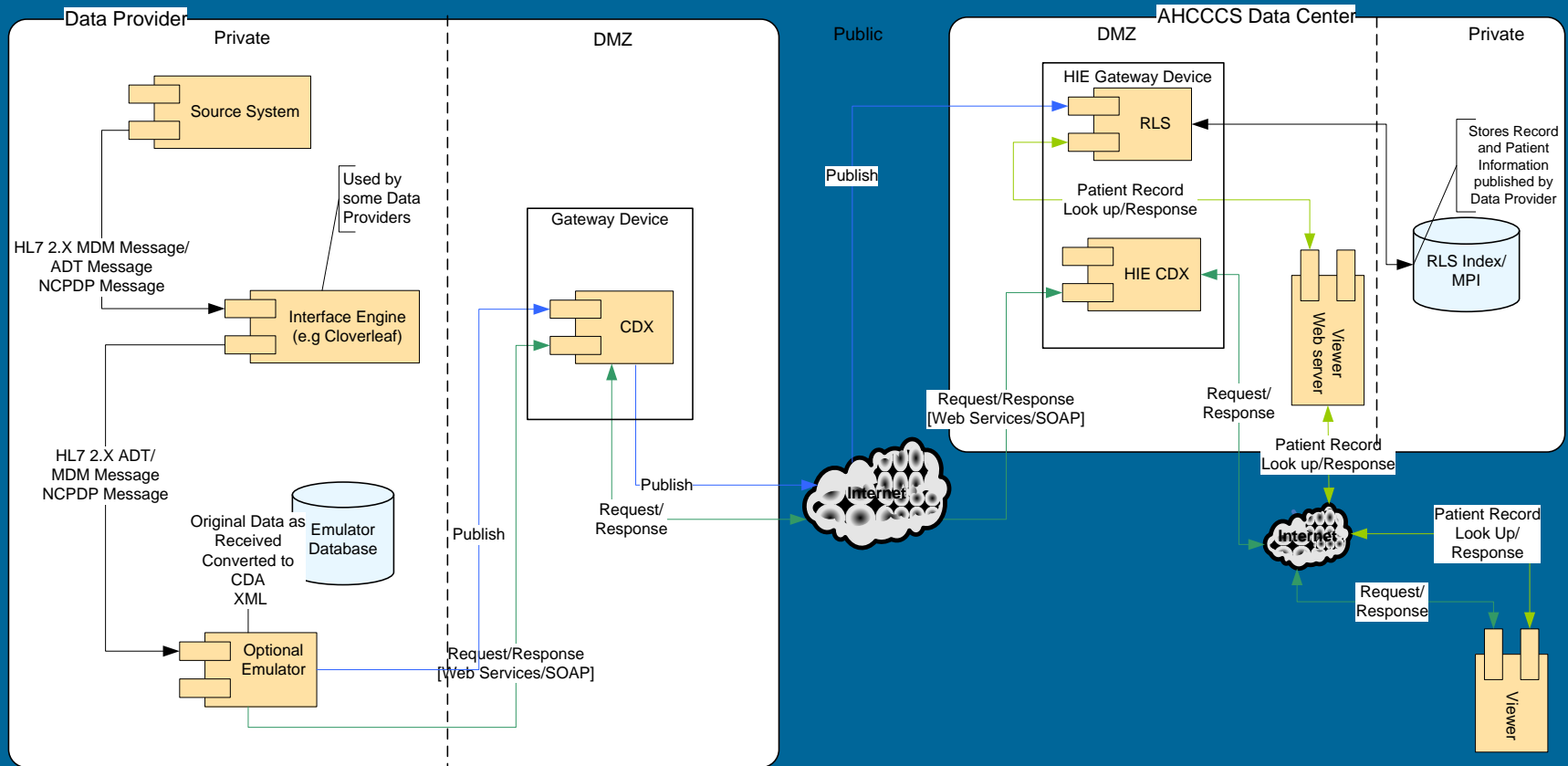
# Big picture. Build trust.



“Foundation of any HIE is building social capital, a radius of **trust and goodwill**, among competing and disparate stakeholders who want to initiate an exchange.”

<http://www.ehealthinitiative.org/sitemap.msp>

# Start federated. Centralized data storage is complex.



# Model agreements and policies are only a start.

- Markle Foundation core <http://www.connectingforhealth.org/>
- Participation Agreement and policies from Arizona HISPC Health Information Security and Privacy Collaborative  
<http://www.rti.org/page.cfm?objectid=09E8D494-C491-42FC-BA13EAD1217245C0>
- Negotiate toward “best-practice”
  - Entity-specific concerns and agreements
  - Technical solutions
  - Expanded policies and specific procedures
    - » Patient Consent and Notice
    - » Registration and Authentication
    - » Data Access, Use and Control
    - » Data Submission
    - » Security Standards

# Harmonizing statutes.

(substance abuse, mental health, communicable disease, reproductive health)

TYPE OF HEALTH INFORMATION	CITE	REQUIREMENT
Federal Drug and Alcohol Treatment Information	42 CFR Part 2	Applies only to federal drug and alcohol treatment programs. Permits disclosure without consent for treatment only “to medical personnel who have a need for information about a patient for the purpose of treating a condition which poses an immediate threat to the health of any individual and which required immediate medical intervention.” 42 CFR 2.51.
Mental Health Information	ARS 36-501, <i>et seq.</i>	Permits disclosure without consent to “physicians and providers of health, mental health or social and welfare services involved in caring for, treating or rehabilitating the patient.” ARS 36-509(A)(1). Applies only hospitals with licensed behavioral health facilities. ARS 36-501(19).
Genetic Testing Information	ARS 12-2901, <i>et seq.</i>	Permits disclosure without consent to an agent or employee of a health care provider if “(a) The health care provider performs the test or is authorized to obtain the test result by the person tested for the purposes of genetic counseling or treatment ; (b) the agent or employee provides patient care, treatment or counseling; and (c) the agent or employee needs to know the information in order to conduct the test or provide patient care, treatment or counseling.” ARS 12-2802(6). The statute also permits disclosure to a “health care provider that assumes the responsibility to provide care for, or consultation to, the patient from another health care provider that had access to the patient’s genetic records.” ARS 12-2802(11).
HIV and Communicable Disease Information	ARS 36-661, <i>et seq.</i>	Permits disclosure without consent to “an agent or employee of a health facility or health care provider to provide health services to the protected person or the protected person’s child or for billing or reimbursement for health services.” ARS 36-664(A)(3). Communicable disease defined as any disease reportable to ADHS or a county health department. HIV included in this category; no separate requirements for HIV.



# HIE takes a village.

- Data providers
  - Executive and Strategic
  - Legal and Contracts
  - Compliance and Medical Records
  - Technical
  - Clinical
  - Outreach and Public Relations
- External Stakeholders
  - Arizona Health e-Connection [www.azhec.org](http://www.azhec.org)
  - HISPC\* legal workgroup and products
  - others
- Internal Stakeholders (AMIE core team, consultants, AHCCCS leadership and operations)

# Inaugural users are key.

- 40 clinician users (MD, DO, PA, NP and delegates)
- Relationship to anchor hospital system
- Diverse specialties and settings
  - Family Practice, Internal Medicine, Cardiology, Surgery, Psychiatry, Pediatrics
  - Emergency Departments; ambulatory (academic and community) clinics; private practice; telemedicine
- 3 months (September through December 2008)
- 3 clinical record types (all payors-not just Medicaid)
  - Medication History (PBM claims aggregator)
  - Discharge Summaries (3 Hospital Systems)
  - Laboratory Test Results (SonoraQuest)

# Set realistic expectations and communicate often.

- Letter of Understanding
- “Empty HIE” – medication history only on day 1
- Multimodal communication
  - Provider Relations Manager
  - Live Training
  - Email, telephone and visits
  - Facilitated Information Gathering Sessions (FIGs)
  - Dedicated website
    - Training and Resources
    - Weekly e-Feedback Forms
    - Updates and Meeting Registration
    - Landing page for AMIE access
  - 24/7 telephone support
- Evaluation by University of Arizona

# 1. AMIE helps avoid admissions and procedures!

- Discharge summaries are very helpful. Patients often cannot tell you what hospital they were in and in general are poor about providing medical history.
  - Pediatrician
- AMIE has proven useful for not ordering an additional CT Scan on a patient who presented shortly after an admit to the hospital.
  - Gastroenterologist
- After finding a discharge summary on a patient I was able to see that the patient had actually been in the hospital very recently. ..pull the record within minutes and locate all the patient's history.
  - Emergency Department Physician
- I was able to confirm that my patient had a cardiac workup within 90 days and was able to avoid an admission because of it.
  - Emergency Department Physician

## 2. AMIE helps improve safety!

The biggest benefit for me has been around patient safety. The more information you know about the patient the better doctor you will be for them.

Surgeon

A coding, comatose patient arrived. All we had was a name, no history. I crossed my fingers and went to AMIE. BANG!!! He was there! All his meds and his extensive health history was printed out quickly and in the doctor's hand.

Emergency Department Unit Secretary

The very first day after training, a physician needed a medication history. He did not know about AMIE and its power! It took me literally 2 minutes get this from AMIE.

Emergency Department Unit Secretary

### 3. AMIE helps avoid adverse drug reactions!

A patient taking a medicine for seizures thought he was off it. I was able to clarify he was indeed still being prescribed that medication.

Emergency Department Physician

An elderly patient I had seen for a few years always brought a hand-written list of meds. AMIE showed she was taking an MAO inhibitor, not listed on her list. This antidepressant medication has many serious medication and food interactions.

I had no idea she was taking this medication. I was able to contact all of her consultants and assure that her other prescriptions were safe, and that she is adherent to the dietary restrictions.

Internal Medicine Physician

## 4. AMIE combats diversion and drug seeking!

- Clearly the biggest benefit has been with drug diversion and seeking.
  - Emergency Department Physician
- The patient visited 32 different doctors and had been prescribed narcotics on average every three days before eventually presenting to the ED. I was able to intercept and provide rehab/social services to this patient. This tool has and will make a world of difference in bettering patient care and overall care at the ED level.
  - Emergency Department Physician

# 5. AMIE improves efficiency!

I feel triumphant when I find patient information AMIE. No phones calls, faxes or waiting for data to help me with clinical decisions.

– Internal Medicine Physician

I just want to say thank you....it has really helped out so much. I know there are more hospitals coming on board and not all patients are out there, but in time this system is going to be the BOMB in patient care especially for bad historians, traumas, codes, unresponsive patients, ALOC, and drug seekers.

–Emergency Department Unit Secretary



## 6. AMIE helps us see the possibilities for better care!

- Very organized and very well thought out...something that physicians have wanted for a very long time. Disparate hospitals need this. This is a fantastic effort...hope we keep it going forward.
  - Surgeon
- I think that ultimately this could be probably the most crucial intervention to revolutionize our health care in the state.
  - Internal Medicine Physician

# AMIE would be better if:

- ***More Data***

- More record types
- More data providers (including immunizations)
- More history
- More current

- ***More Access***

- More users
- More access, including PDAs

- ***More Functionality***

- Use with EMRs
- Single sign-on

**Reflect. Revise.**  
**Build more trust.**



# SAHIE (Southern Arizona Health Information Exchange)

## Social capital, selected vendor.

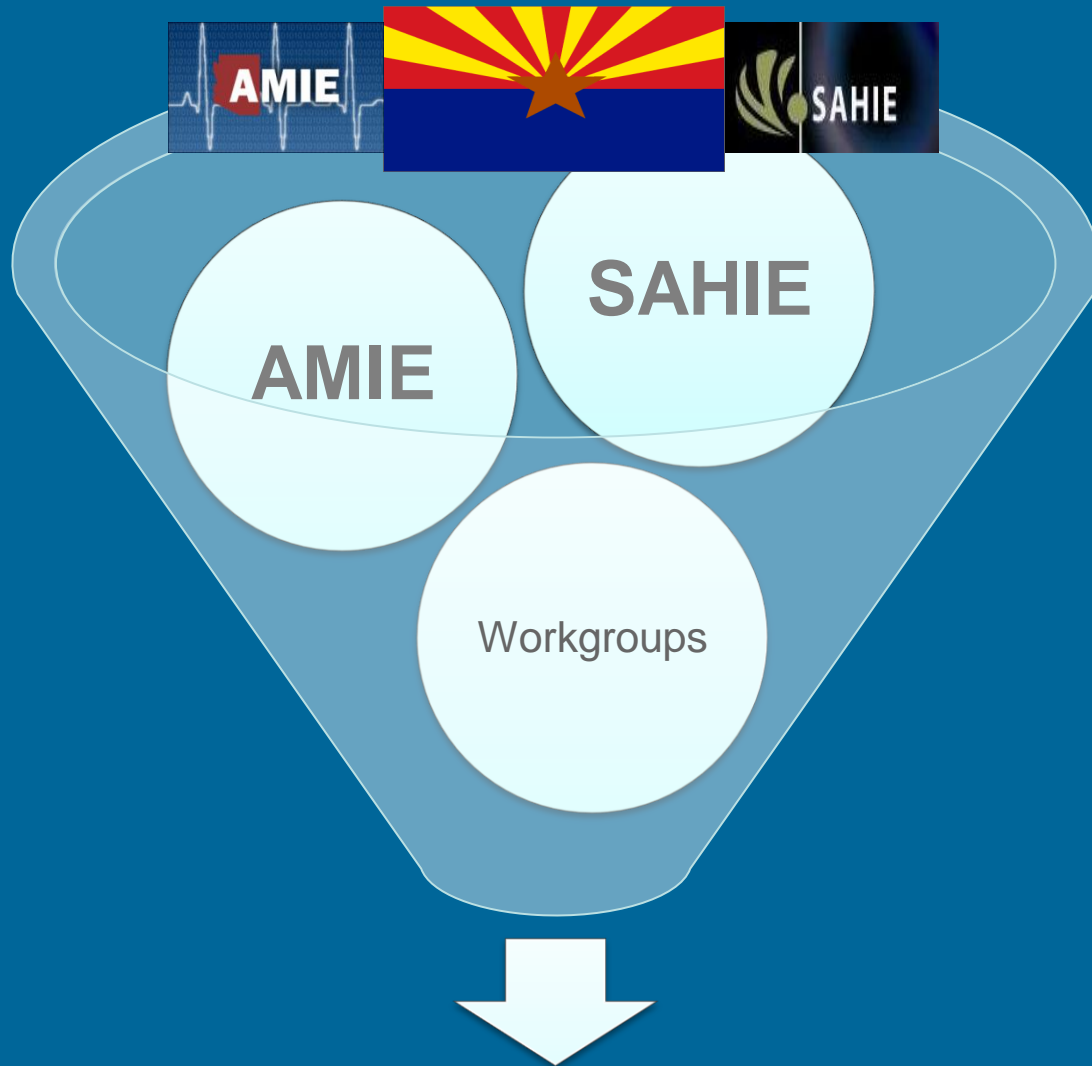


# HIE Affiliation Milestones

- December 2009 Joint AMIE SAHIE (JAS) Meeting
- January 2010 JAS Workgroups start
- March 2010 MOU executed
- April 2010 Transition Committee formed
- May 2010 Articles of Incorporation filed
- June 2010 Key documents approved by both boards
  - » Charter
  - » Bylaws
  - » Affiliation Agreement
  - » Business Plan
  - » Communication Plan
  - » Work plan and CEO Position Description
- July 2010 SAHIE and AMIE Boards comprise HINAz
- August 2010 SAHIE and AMIE wind down
- September 2010 HINAz HIE operations commence

# AMIE & SAHIE (Southern Arizona Health Information Exchange)





**Health Information Network of Arizona  
est. July 12, 2010**

# Purchasing & Assistance Collaborative for Electronic Health Records





# PACeHR Initiation

1. Agree on concept and charter
2. Assess needs and gather requirements
3. Translate requirements to solicitation and contracts
4. Create and implement transparent community selection process
5. Select and negotiate contracts
6. Create organization
7. Recruit inaugural subscribers for Pilot

# PACeHR Timeline

- 2008
  - September: Project and Program chartered
  - December :Over 1000 clinicians interested
- 2009
  - February : Solicitation for EHR solutions
  - June: Incorporated non-profit 501(c)(3)
  - September : Inaugural EHR vendors contracted
    - EMDs
    - Noteworthy Medical Systems
  - October: Pilot Kick-off with 8 practices
  - November : Executive Director selected
- 2010
  - Incorporate Lessons Learned from Pilots
  - Regional Extension Center integration

# PACeHR Mission and Vision

## ***Mission***

*Foster EHR adoption **and** information sharing by leveraging web-based technologies, economies of scale, aligned metrics and strategic partnering*

## ***Vision***

Every Arizona clinician will have access to an affordable, interoperable, CCHIT-certified, web-based electronic health record solution, including support, services and products

# PACeHR Value Proposition

1. Assist providers with selection, acquisition, installation and contract negotiation of affordable EHR systems
2. Provide user support services that enable clinicians to achieve meaningful use of EHRs in their practices and with health facilities and managed care organizations
3. Improve quality, safety and operational efficiency while managing overall costs.

# Community Needs Assessment

- AZ Health-e Connection Roadmap (2005)
- Provider focus groups (2007/8)
- Arizona Medical Board Survey (ASU-CHIR)
- Stakeholder involvement
  - Presentations
  - Letter of Interest
  - Interviews
  - Articles and survey dissemination
  - Evaluation Panel volunteers
  - Demonstration Day participation

# Provider Partners

- Arizona Medical Association
- Arizona Osteopathic Medical Association
- American College of Physicians-AZ
- American College of Obstetricians and Gynecologists
- American Academy of Pediatrics-AZ
- American Academy of Family Physicians-AZ
- Arizona Nurse Practitioner Council
- Arizona State Association of Physician Assistants
- Arizona Latin American Medical Association
- Maricopa and Pima County Medical Associations
- Arizona Dental Association
- Arizona Health Care Association

# Community Partners

- Arizona Health e-Connection
- Health Services Advisory Group
- Arizona Hospital Association
- Medical Group Management Association
- Arizona Public Health Association
- Arizona Rural Health Association
- Arizona Department of Health Services
- Government Information Technology Agency
- Arizona Health Information Management Assn.
- AHCCCS and AHCCCS health plans

# Key Benefits

- Standard pre-negotiated master contract, end use license agreement and provider contracts
- Certified, web-based EHRs chosen by AZ clinicians
- Affordable, comprehensive monthly subscription
- Interfaces with core services providers
- “Meaningful use” guarantee
- Discounted hardware, software, services; loans
- Pre and Post-implementation assistance
  - Needs assessment and workflow re-engineering
  - Training and implementation assistance
  - User Group and Peer Network
- Collaborative measures reports design and maintenance, with streamlined delivery



# Standardized Inquiry (Index)

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Background Information

# Standardized Inquiry - Letter of Intent

1. Deliver and maintain an affordable, interoperable, CCHIT-certified high-performing web-based electronic health record system, including support and maintenance.
2. Intuitive, flexible, modular, scalable, and designed to provide the structured reports needed to support the broad range of local and national quality, value, safety, transparency and population health initiatives
3. Understanding of and plan to engage in a productive collaboration with Purchasing Assistance Collaborative for Electronic Health Records (PACeHR) Program partners and stakeholders.

# SI Functional Specifications Highlights

- **E-prescribing** (med list, allergies, interactions, formularies, refills)
- **Clinical documentation** (medical history, problem list, SOAP notes)
- **E-referrals** (Continuity of Care Record (CCR) export, attachments, tracking)
- **Bi-directional core interfaces** (lab, radiology, hospital, other key service providers and practice management systems and health information exchange (HIE))
- **Clinical decision support** (EPSDT, chronic illness)
- **Eligibility verification** (AHCCCS and others )
- **Practice management modules** (scheduling and charge entry, financial and administrative modules)
- **Patient portal** (secure messaging, scheduling, education, PHR)
- **Standard Reports and Delivery** (Medical Home, EPSDT, HEDIS and ad-hoc reporting tools)
- **Case Management, Dental, Behavioral Health, LTC**
- **E Discovery**

# SI Technical and Offeror Highlights

- Vendor-hosted solution (web-based)
- Standards-based and interoperable
- Supports multiple inputs and remote access
- Patches and upgrades included subscription
- System architecture supports continuous availability and is scalable at site
- Performance and system availability metrics and monitoring; service level agreements
- Security
- Disaster recovery and continuity

# Scoring Methodology

Key Areas of Scoring		
Functional	Technical	Pricing
Special Considerations	Clarifications and Analysis	Demonstrations

# SI Minimum Criteria

PACeHR - Purchasing Assistance Collaborative for electronic Health Record  
SUMMARY --- Offeror's Minimum Entrance Criteria  
LEVEL 1

#	OFFERER NAME	OFFEROR PRODUCT NAME	MINIMUM CRITERIA #1 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #2 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #3 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #4 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #5 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #6 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #7 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	MINIMUM CRITERIA #8 SI REFERENCE Scoring Yes = 1 (Green) No = 0 (Red)	TOTAL MINIMUM CRITERIA SCORE
			CCHIT Certification: The proposed product offering must be CCHIT certified in 2007 or 2008	Product must provide e-Prescribing and could be implemented as a stand-alone module	Product must provide the capability to do Interfaces, Inbound and Outbound	Product must provide Health Outcome Measures through data extracts or reports (standard & Adhoc)	Product must be a hosted web-based solution	Offeror must provide web-based Training	Offeror must allow contracts directly with providers	Product must provide E&M Coding	
			Exhibit E: Specifications & Requirements - Functional Section 1	Exhibit E: Specifications & Requirements - Functional Section 7	Exhibit E: Specifications & Requirements - Functional Section 23	Exhibit E: Specifications & Requirements - Functional Section 26	Scope of Work	Exhibit E: Specifications & Requirements - Offeror Section 3	Attachment C: Collaterals FAQ 6	Exhibit E: Specifications & Requirements - Functional Section 6	
1	<Enter Offeror Name #1>	<Enter Offeror Product Name #1>	1	1	1	0	0	0	0	0	3
2	<Enter Offeror Name #2>	<Enter Offeror Product Name #2>	1	1	1	0	0	0	0	0	3
3	<Enter Offeror Name #3>	<Enter Offeror Product Name #3>	1	1	1	0	0	0	0	0	3
4	<Enter Offeror Name #4>	<Enter Offeror Product Name #4>	1	1	1	0	0	0	0	0	3
5	<Enter Offeror Name #5>	<Enter Offeror Product Name #5>	1	1	1	0	0	0	0	0	3

# SI Detailed Scoring Tool

## PACeHR STANDARDIZED INQUIRY - FUNCTIONAL REQUIRMENTS SCORING FOR OFFEROR #xx, < Insert Offeror Name>

	CRITERIA: Functional	STANDARD INQUIRY REFERENCE	NOTES	CURRENT FUNCTIONALITY	FUNCTIONALITY IN DEVELOPMENT Enter Yes or No	GENERAL AVAILABILITY ESTIMATED DATE
#	SI Requirement:			<b>5 = Significantly exceeds requirements;</b> achievable; applies best practices; clearly and concisely presented; logically organized; well integrated <b>4 = Substantially meets requirements;</b> achievable; applies best practices; clearly and concisely presented; logically organized; well integrated <b>3 = Minimally meets requirements;</b> achievable; suitable; acceptably presented; organized; integrated <b>2 = Somewhat less than meets requirements;</b> somewhat suitable; less than acceptably presented; somewhat unorganized; somewhat integrated <b>1 = Significantly less than requirements;</b> not fully suitable or addressed <b>0 = Requirement(s) not addressed</b> or no details/explanation provided		
	<b>TOTAL SCORE</b>	<b>222</b>		<b>30</b>		
1	Is your product CCHIT certified? If Yes, specify the year CCHIT certification was received	Item - 1 Description - Functional Specification and Requirements Page # - 26	Product received CCHIT certification in 2007	5		
2	Does your product support an Enterprise Master Patient Index to track a patient across an integrated or disparate group of health providers and clinics?	Item - 2 Description - Master Patient Index Page # - 27		4		
3	Does the Enterprise Master Patient Index use online checks to verify information is accurate?	Item - 2 Description - Master Patient Index Page # - 27		3		
4	Does the Enterprise Master Patient Index include the ability to record eligibility information and insurance coverage?	Item - 2 Description - Master Patient Index Page # - 27		2		
5	Does your product support third party Enterprise Master Patient Indexes and if so, which ones have you deployed in production environments?	Item - 2 Description - Master Patient Index Page # - 27		1		
6	Does your product support of order entry for diagnostics, including laboratory tests, radiology, and others is integrated with the patient's medical record and the practice workflow?	Item - 3 Description - Order Entry and Results Reporting Page # - 27		0		
7	Does your product support user's entry of orders online and ability to view results online?	Item - 3 Description - Order Entry and Results Reporting Page # - 27		5		
8	Does your product support the notification of the availability of results, abnormal results, or late results with automatic routing of the notifications to the appropriate user?	Item - 3 Description - Order Entry and Results Reporting Page # - 27		4		
9	Does your product support the use of order status updates in a bi-directional mode?	Item - 3 Description - Order Entry and Results Reporting Page # - 27		3		
10	Is there a limit to the number of user-defined fields? If yes, specify the number of user-defined fields allowed.	Item - 3 Description - Order Entry and Results Reporting Page # - 27		2		

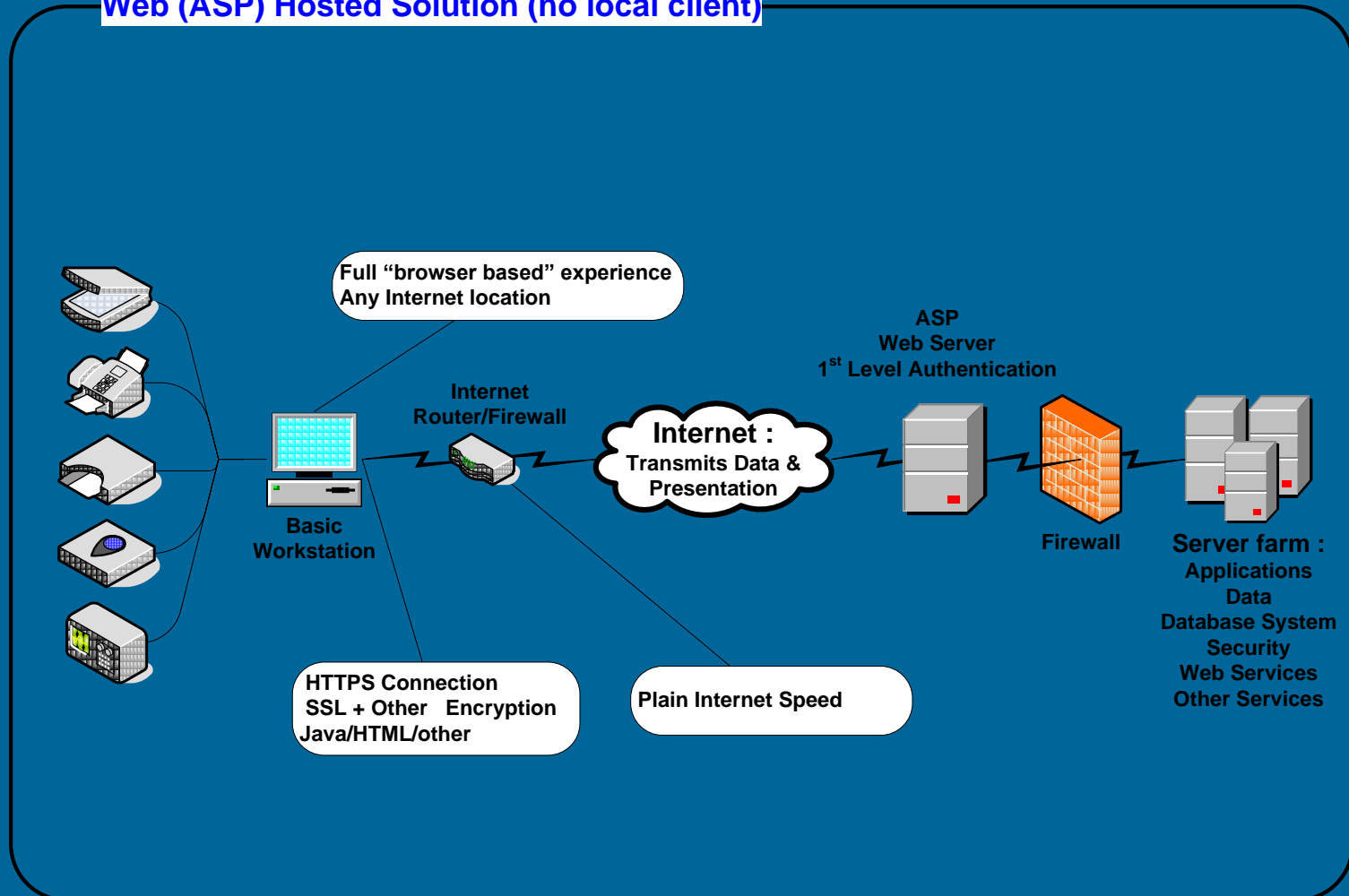
**PACeHR - Purchasing Assistance Collaborative for electronic Health Record  
OVERALL SCORING TOOL**

[illegible]



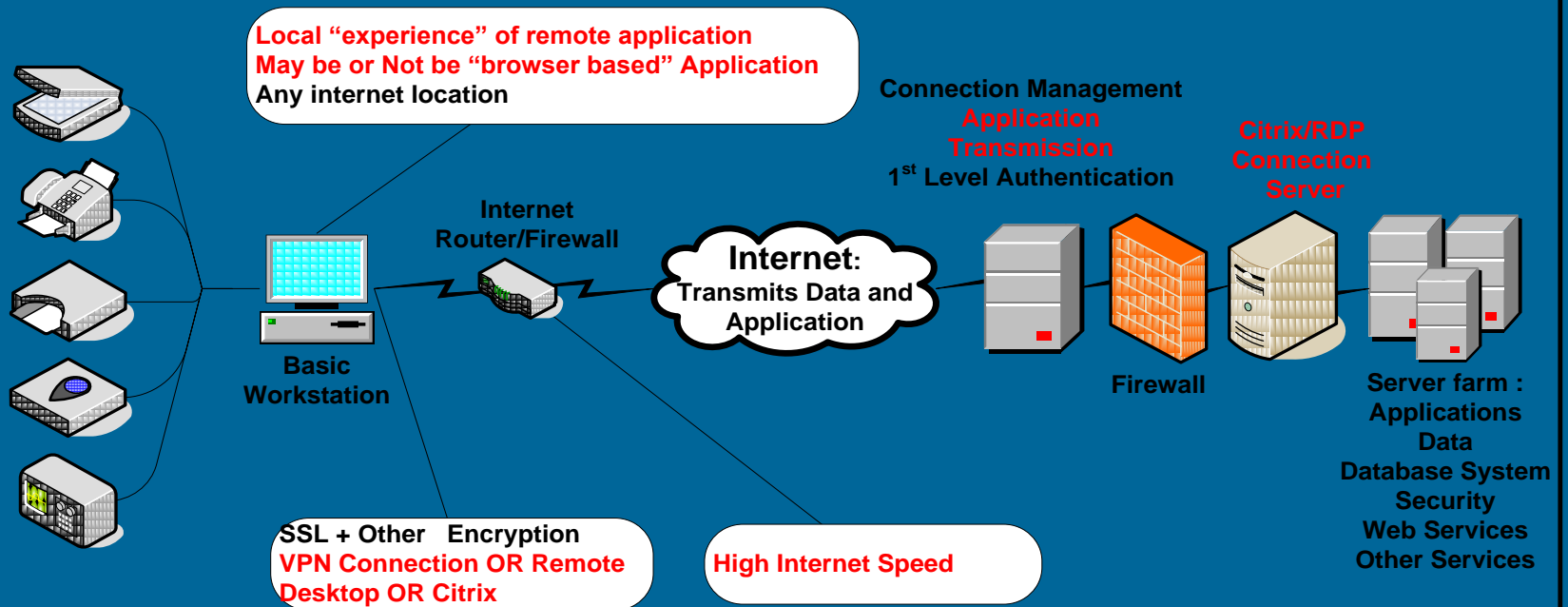
# Web Hosted Solution

## Web (ASP) Hosted Solution (no local client)



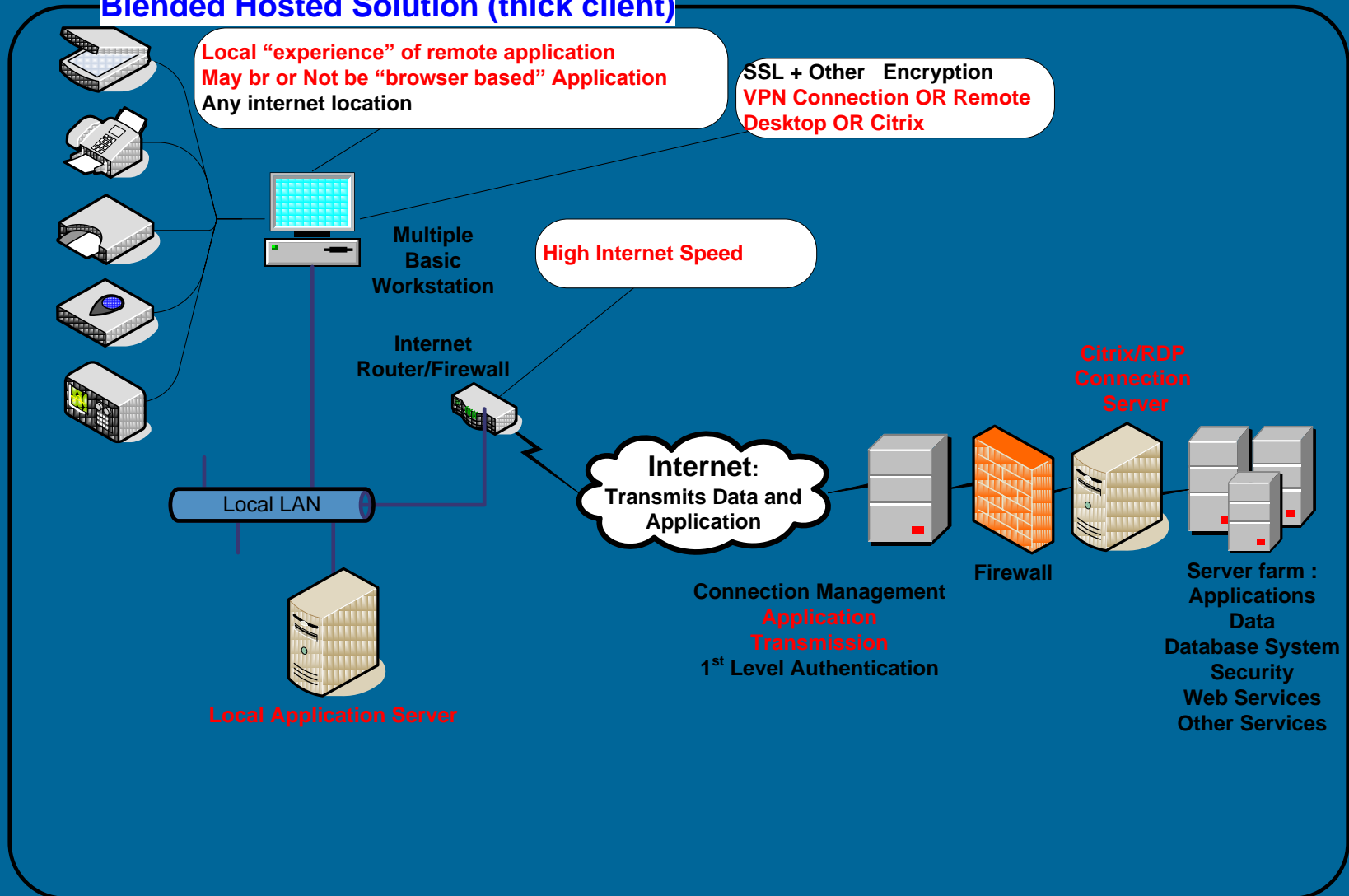
# Hosted

## Hosted Solution (thin client)



# Blended Hosted

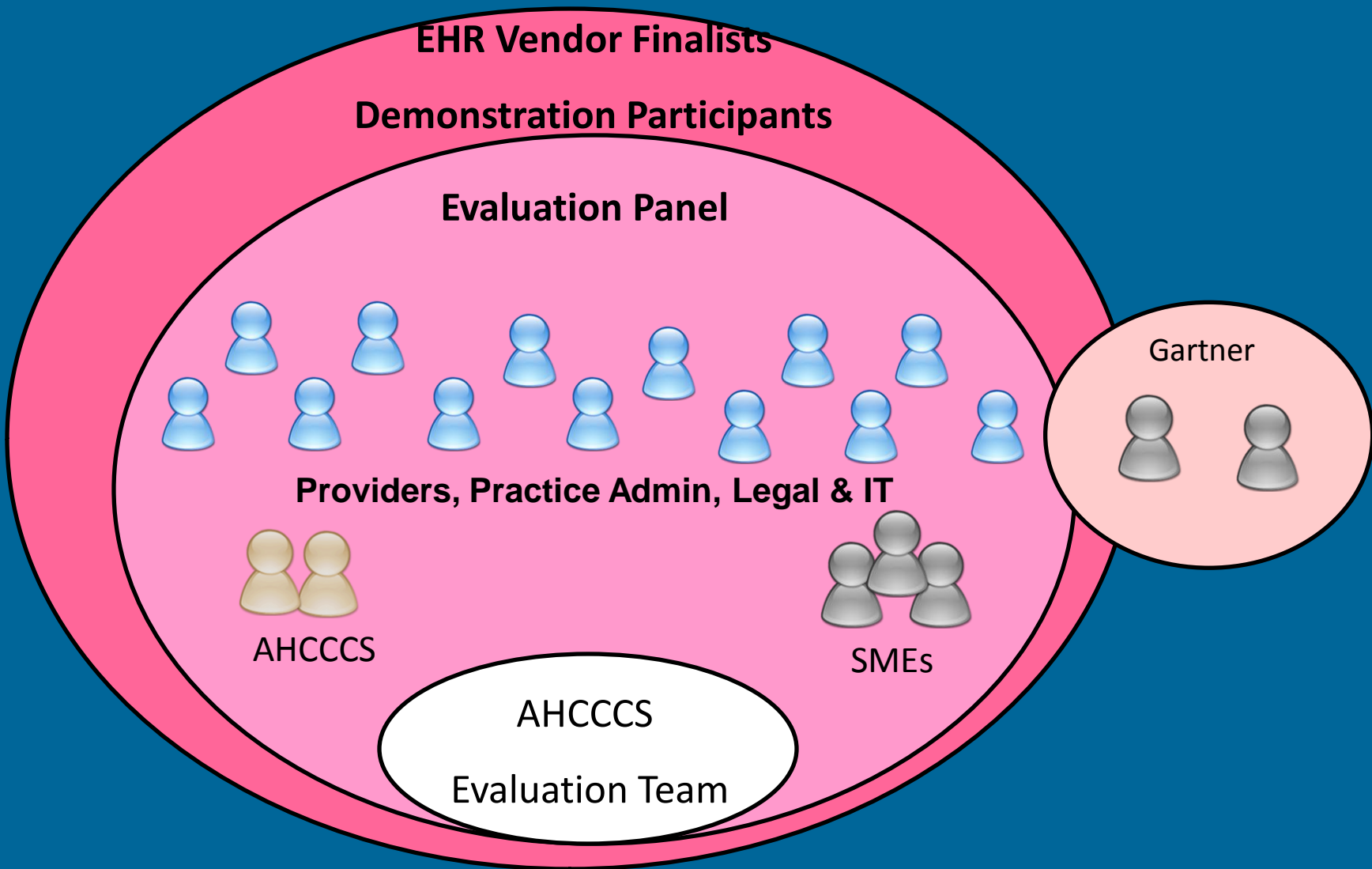
## Blended Hosted Solution (thick client)



# Pricing Methodology

- Started with “Small Practice <5” Offering
  - Minimum Criteria of \$500 per full-time user per month
  - One-time Implementation Costs
  - Two Year Per Month Plus Implementation Costs
  - Three + Years Per Month Plus Implementation Costs
  - Total Costs Over Five Years (without embedded)
- Added embedded costs

# Collaborative Selection Process



# PACeHR

## Roles and Responsibilities

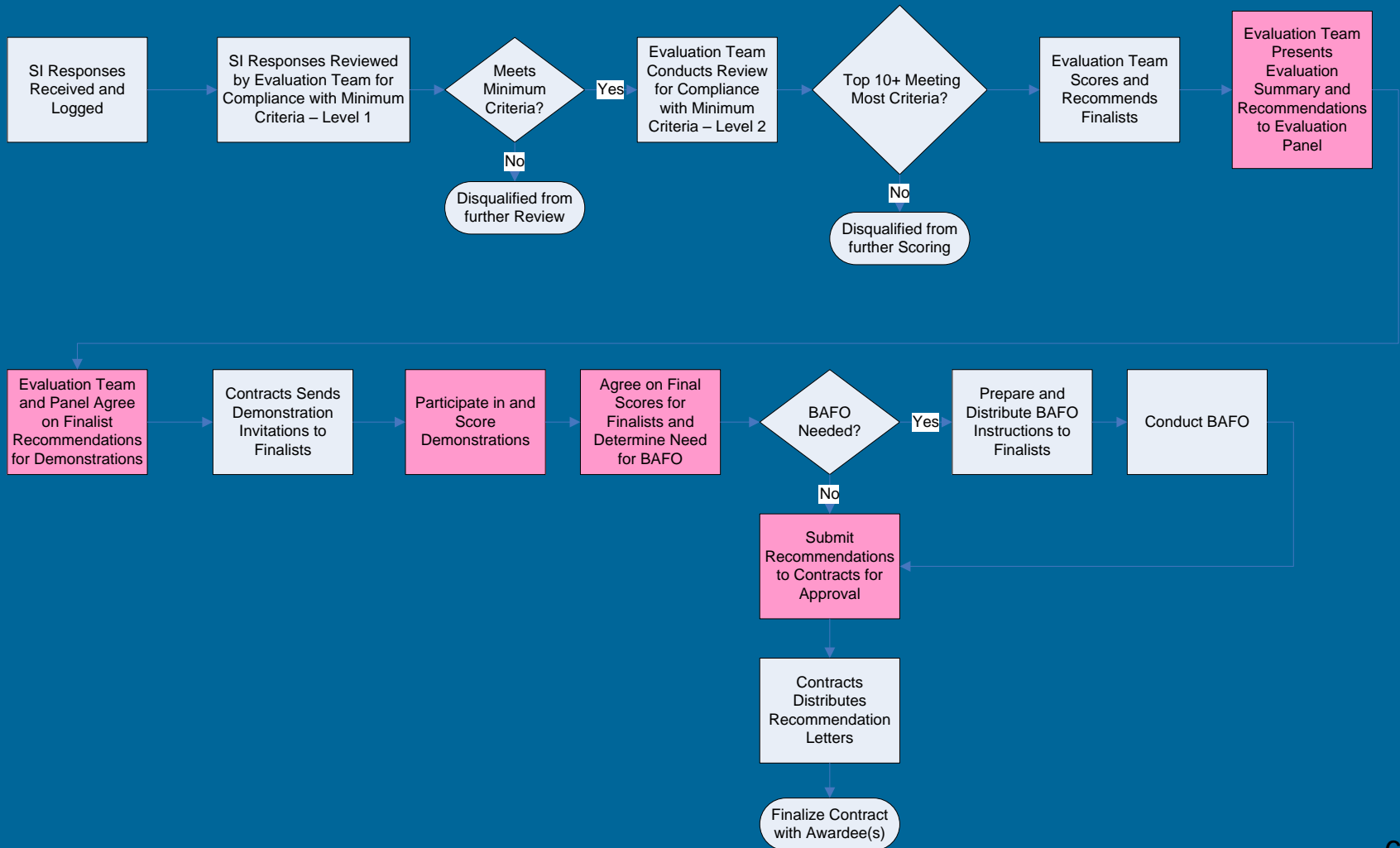
Team	Roles and Responsibilities	Members	Time Commitment
PACeHR Evaluation Panel	<p><u>Objective</u></p> <ul style="list-style-type: none"> <li>Determine the EHR Offeror Selection &amp; Award(s)</li> </ul> <p><u>Roles &amp; Responsibilities</u></p> <ul style="list-style-type: none"> <li>Participate in the detailed reviews to SI responses</li> <li>Participate and provide feedback for EHR finalists' demonstrations</li> <li>Participate in all required meetings</li> <li>Subscribers and End-Users of PACeHR</li> <li>Publically promote and support PACeHR</li> </ul>	<p><u>Representatives</u></p> <p>American Academy of Pediatrics  American College of OB/GYN  American College of Physicians  Arizona Association of Family Practice  Arizona Medical Association  Arizona Nurse Practitioners Council  Arizona Osteopathic Medical Assoc.  Arizona State Association of PAs  Health Services Advisory Group  Medical Group Management Association  ASU and UoA Representative  AHCCCS  Subject Matter Experts (SMEs)</p>	1-4 Hours per Week for 6 Weeks
EHR Offeror Finalists' Demonstration Participants	<ul style="list-style-type: none"> <li>Participant and provide feedback for EHR finalists demonstrations</li> <li>Subscribers and End-Users of EHR</li> <li>Future Members of PACeHR</li> </ul>	<p>Clinicians &amp; Practice Administration  Health Plans  Other Interested Participants  (must pre-register for demonstrations)</p>	4-8 Hours per Week for 2 Weeks (April 2009)

# PACeHR

## Roles and Responsibilities (continued)

Team	Roles & Responsibilities	Members	Time
<p>AHCCCS Evaluation Team</p> <p>1.AHCCCS SMEs 2.AHCCCS Contracts 3.PACeHR Core Team</p>	<p><u>AHCCCS SMEs and PACeHR Core Team</u></p> <ul style="list-style-type: none"> <li>Define and develop scope of Standardized Inquiry (SI)</li> <li>Accountability for oversight of EHR Selection Methodology</li> <li>Facilitate and coordinate activities of the PACeHR program and teams</li> <li>Conducts reviews of the SI Offerers' responses for ability to meet minimum and core requirements</li> <li>Prepares SI Offerers' responses summary and recommendations to the PACeHR Evaluation Panel</li> </ul> <p><u>AHCCCS Contracts:</u></p> <ul style="list-style-type: none"> <li>Consultation with PACeHR Core Team to produce Standardized Inquiry (SI)</li> <li>Releases the Standardized Inquiry (SI) to all designated Offerors according to the standard process</li> <li>Monitors and tracks responses to EHR Standardized Inquiry (SI) from Offerors</li> <li>Oversight in review of Offerors' SI responses</li> </ul>	<p><u>AHCCCS SMEs</u></p> <p><u>AHCCCS Contracts</u> Patricia Wilkinson Jamey Schultz Michael Veit</p> <p><u>PACeHR Core Team</u> Anita Murcko, AHCCCS Brent Bizik, AHCCCS Pat Rennert, AHCCCS Linda Schwank, AHCCS Linda Campbell, SME</p>	<p>4-8 Hours per Week for 10 Weeks</p>
Healthcare SMEs	<ul style="list-style-type: none"> <li>Validate EHR system selection methodology</li> <li>Provide healthcare industry SME expertise</li> </ul>	Gartner Team	<p>4-8 Hours per Week for 10 Weeks</p>

# SI Evaluation Process Overview





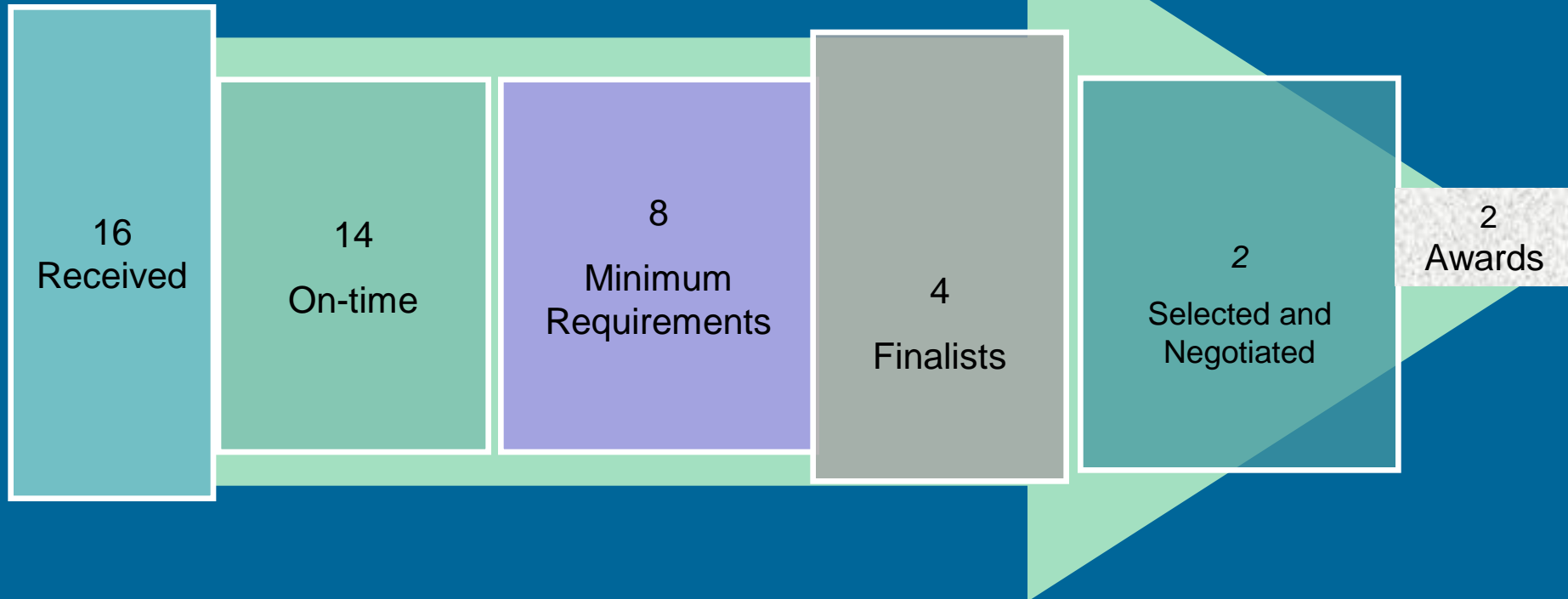
# Products Selection Summary

March 30, 2009

April 15, 2009

May 29, 2009

June 30, 2009



# PACeHR Selects Technology Partners

FOR IMMEDIATE RELEASE

*Alliance with e-MDs and Noteworthy Medical Systems*

**PHOENIX, Ariz. – Sept. 30, 2009** – The Purchasing & Assistance Collaborative for Electronic Health Records (PACeHR) today announced the selection of e-MDs and Noteworthy Medical Systems, Inc. as technology partners to provide accessible and affordable electronic health records (EHR) to small and medium-sized group practices in Arizona. The partner agreement will help drive EHR adoption and, thereby, enable clinicians to qualify for financial incentives in accordance with the federal Health Information Technology for Economic and Clinical Health (HITECH) Act, as well as strengthen the foundation for statewide health information exchange (HIE).

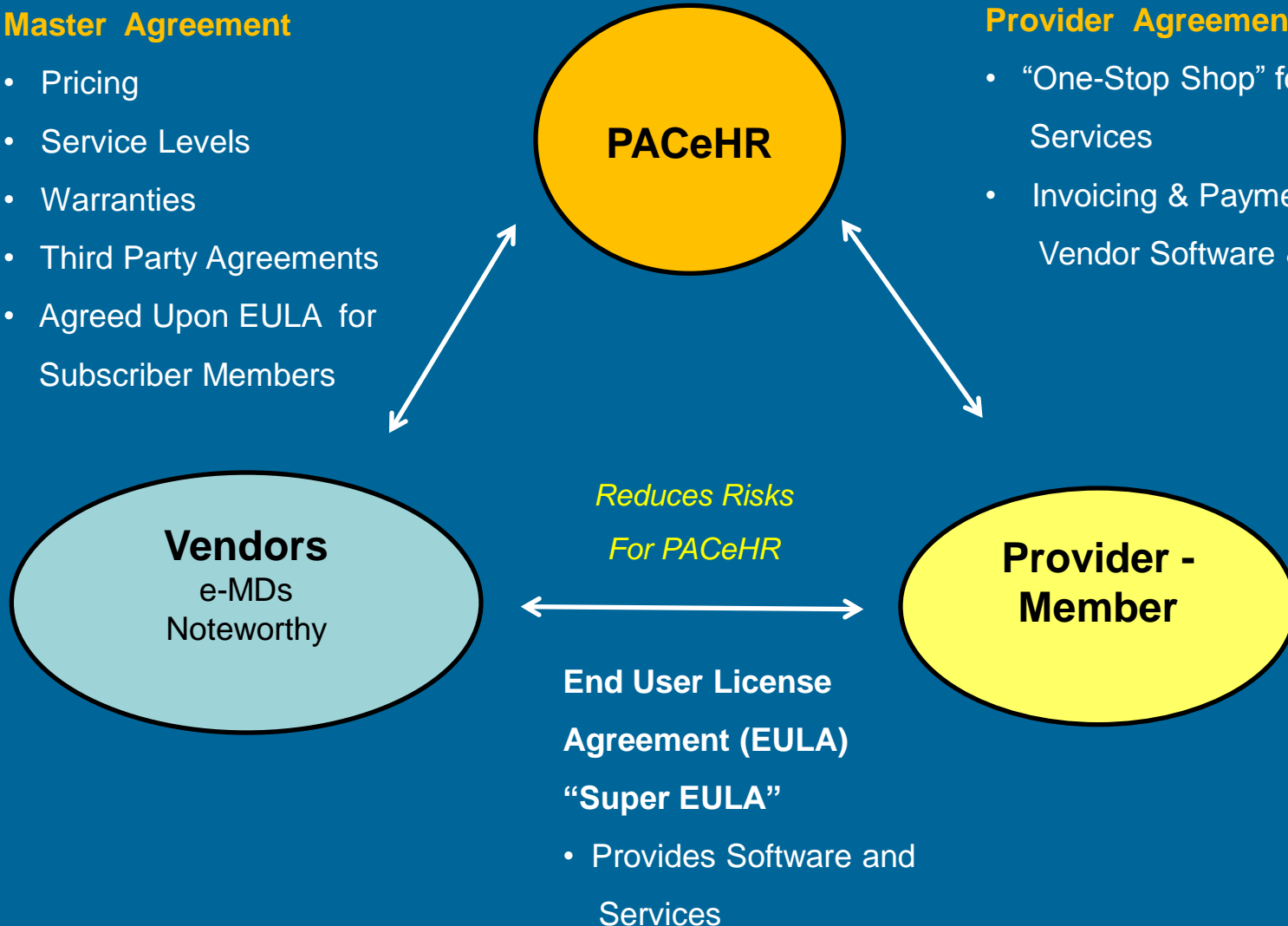
# PACeHR Business Relationships

## Master Agreement

- Pricing
- Service Levels
- Warranties
- Third Party Agreements
- Agreed Upon EULA for Subscriber Members

## Provider Agreement

- “One-Stop Shop” for EHR Services
- Invoicing & Payment for Vendor Software & Services



# PACeHR Standard Bill of Materials

- **PACeHR and Vendor**

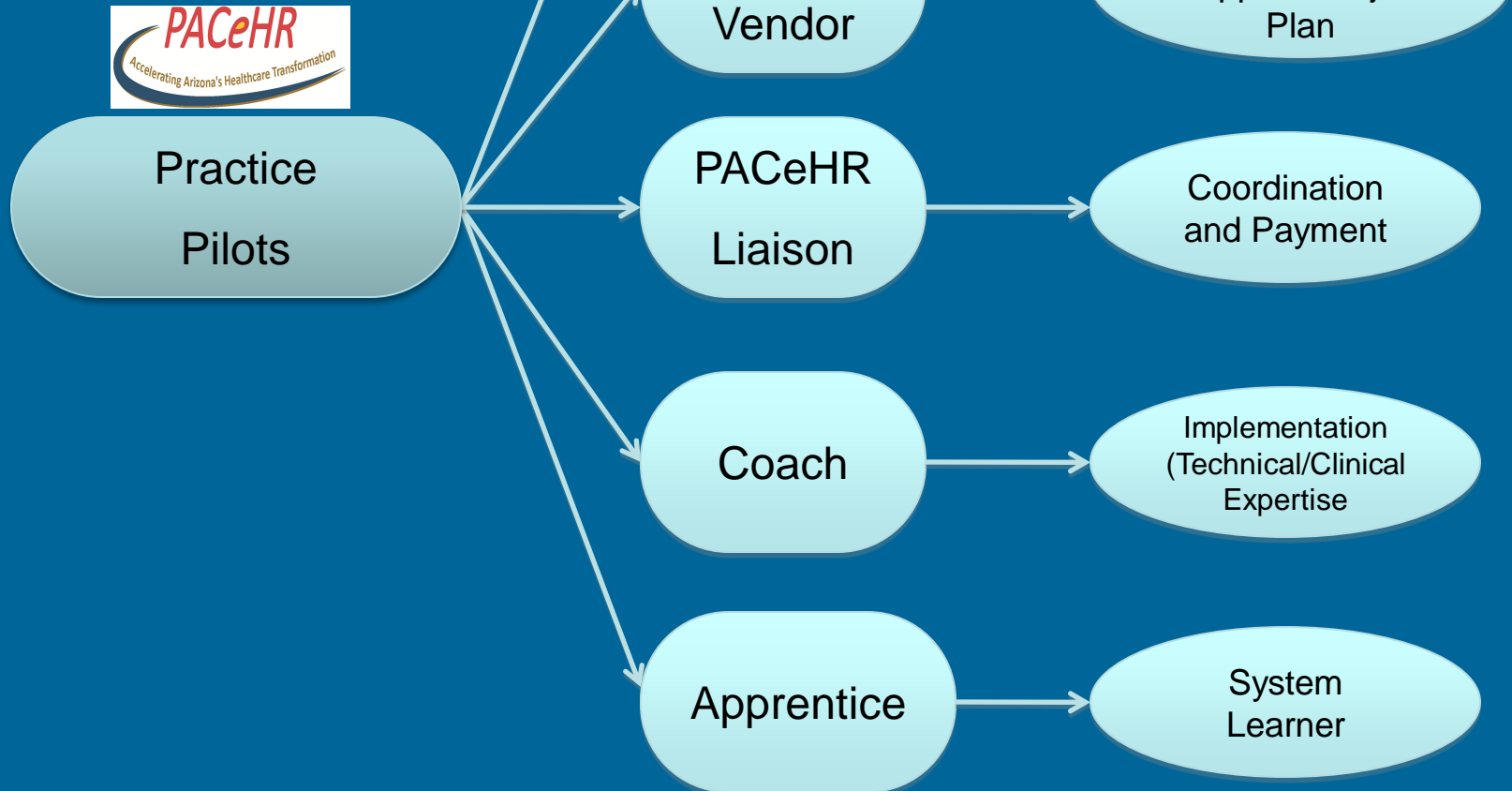
- Monthly Subscription Fees
  - Software - Electronic Health Record (EHR)
  - Software - Practice Management (PM)
  - Web Hosting Fees
- Annual Fees
- Total Start Up Costs
- Practice Hardware Costs (varies practice to practice)
- Taxes

# PACeHR Master Agreement Construct

- Definitions
- Description of Overall Arrangement
- Term and Termination
- Fees, Invoicing, and Payment
- Service Level and Performance Credits
- Project Management and Implementation
- Intellectual Property
- Warranties
- Remedies and Dispute Resolution
- Liabilities - Limitations & Exclusions
- Insurance
- Confidentiality
- Indemnification
- Use of PACeHR name
- Miscellaneous (i.e., Force Majeure, No Solicitation)

## RESPONSIBILITIES

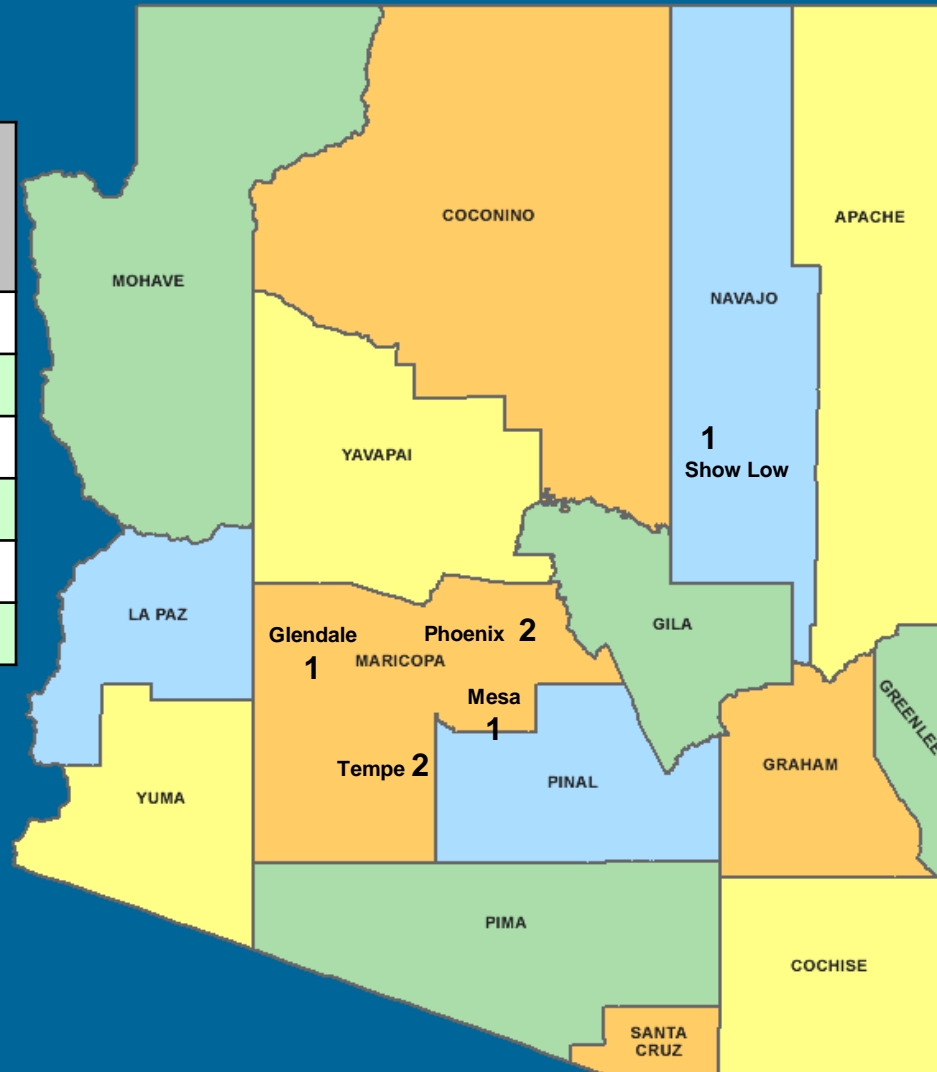
### ROLES



# Pilot Practices

PACeHR PILOT PROGRAM - PRACTICE TYPES

PRACTICE TYPE	# PRACTICES	# CLINICIANS
Family Practice	2	3.5
Internal Medicine	2	5.5
OB/GYN	1	7
Pediatrics	1	1
Surgery	1	2
<i>Summary</i>	7	19



# PACeHR Pilot Scorecard July 31, 2010

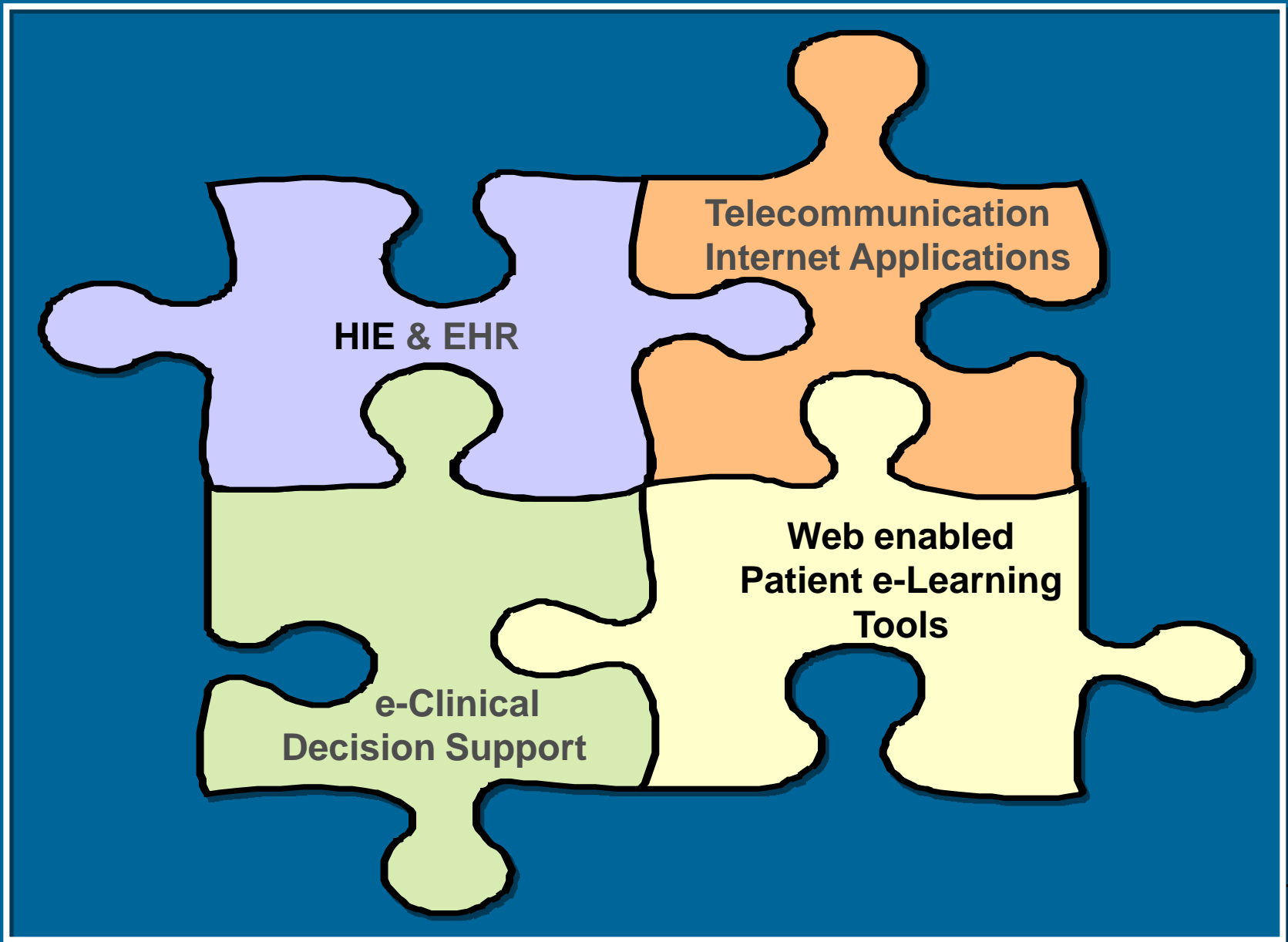
- (9) practices were accepted into the Pilot Program.
  - All received Readiness Assessment through Selection services
- (5) of (9) practices contracted with PACeHR EHR solution and are fully deployed
- (1) adopted an EHR, but contracted with an alternate vendor outside PACeHR EHR contract
  - 66.6% of pilots adopted an EHR

PACeHR PILOT SUCCESS PROGRESSION > 66% Success Rate			
October 2009	Status with PACeHR	Why Successful	Participation %
<b>OASIS OB/GYN PLC</b>	Chose an EHR Vendor w/a strong OBGYN module	Very specific about their requirements	Dropped
<b>Colon &amp; Rectal Center of AZ - #1005</b>	Completed Go-Live – transitioning data	Thought through the options – had a plan.	Active
<b>Dr. Paxton - #1003</b>	Completed System Acceptance – focused on achieving Meaningful Use!	Incredible effort to find root cause of problem; had a plan; stayed focused on goal.	Active; Reference
<b>Kids Connection - # 1002</b>	Approaching System Acceptance – sharing pediatric templates w/EHR vendor		Active Reference
<b>Shalimar Primary Care #1001</b>	Finalizing System Acceptance phase	Tremendous effort by IT partner and EHR vendor	Active
<b>Internal Medicine Associates</b>	Dropped EHR effort – fear of Medicare reimbursement cuts impact on business	N / A	Dropped
<b>Partners In Medicine</b>	Dropped – undecided on next steps	N / A	Dropped
<b>AZ Preferred Primary Care</b>	Completed System Acceptance	Very diligent in efforts to problem solve on their own	Active Reference
<b>Parikh</b>	Dropped – undecided re: vendor choice	N / A	Dropped



# PACeHR Pilot Lessons

- Prioritize services that can be controlled, measured, and improved
- Understand key hurdles impeding accelerated adoption
  - Lack of physical resources? Funds?
  - Lack of knowledge/education: product/solution, project scope/mgt?
- Leverage (EHR/PM & IT) vendors to do they do best
  - Overlap of bodies/services results in complexity and inefficiency
  - Demo, quote, gain signature, implement (to MU)
- Great value does not always equate to a willingness to pay
  - One to one consulting services are intensive to maintain
  - Support and integrate with automation and peer interactions
  - Acting as financial intermediary should be proceeded with caution
- Pros and Cons for a “Preferred’ EHR vendor relationships
  - Costly and complex vetting process unless integrate web-enabled transparent vetting tools
  - Licensing and hosting models must be aligned with salespersons earnings and targets
  - Meaningful collaboration with vendors must be a priority



# AZ Grant Report

AHCCCS - 2007 Medicaid Transformation Grant Final Report - Windows Internet Explorer

http://www.cambiare.us/CMS\_Report/Final\_Report\_TOC.php

Google Search Share Sidewiki Check Translate AutoFill Sign In

Norton Norton Safe Search Search

Favorites eBay Quicken, QuickBooks and ... Sony eBook Library SonyStyle Web Slice Gallery Suggested Sites

home AHCCCS - 2007 ...

Page Safety Tools

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# AMIE & PACeHR Links

- AZ Grant Deliverables (not public yet)
  - [http://www.cambiare.us/CMS\\_Report/Final\\_Report\\_TOC.php](http://www.cambiare.us/CMS_Report/Final_Report_TOC.php)
- AHCCCS Transformation Grant site
  - <http://www.azahcccs.gov/HIT/past/TransformationGrant.aspx>
- PACeHR site (REC)
- <http://www.azhec.org/PACeHRhome.jsp>
- AHRQ Innovations Gallery and Series
  - <http://www.innovations.ahrq.gov/content.aspx?id=2599>
  - [http://www.innovations.ahrq.gov/resources/webinar4/Murcko\\_slides\\_08\\_10\\_09.pdf](http://www.innovations.ahrq.gov/resources/webinar4/Murcko_slides_08_10_09.pdf)
- Commonwealth Fund
- <http://www.commonwealthfund.org/Content/Innovations/State-Profiles/2009/November/Arizona-Medical-Information-Exchange-Outgrows-Medicaid.aspx>



*Thank you!*

Anita C. Murcko, MD, FACP

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